

# ITU WORKSHOP

## Activities of ITU-R Study Group 3 on radiowave propagation

## Scope and Working Methods of ITU-R Study Group 3

EuCAP 2024, Glasgow

---

Author: Clare Allen

Thursday, 21 March 2024



# Terms of reference

Develop and maintain Recommendations in the ITU-R P-Series relating to propagation prediction methods and data for spectrum management purposes, for the design and operation of radiocommunication systems and services and for the assessment of frequency sharing between them.

To provide propagation information and advice to other ITU-R Study Groups in their preparation of the technical bases for Radiocommunication Conferences. Such information typically concerns identifying relevant propagation effects and mechanisms and providing propagation prediction methods.





## 25 Questions

*Questions define the scope of the work undertaken by the Study Group.*

*Questions are proposed by the members of the Working Parties and approved by the ITU-R membership.*

<https://www.itu.int/pub/R-QUE-SG03/en>

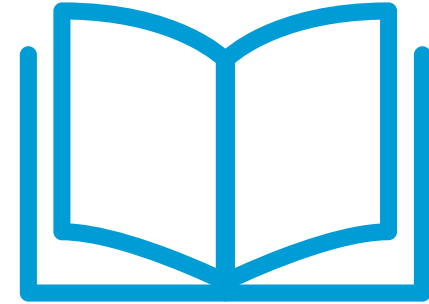


## 83 Recommendations

*ITU-R P-series Recommendations provide propagation prediction methods and data.*

*These recommendations are widely used within the ITU-R Study Groups and by Spectrum managers around the globe, since 2020 there have been more than 1.5 million downloads.*

<https://www.itu.int/rec/R-REC-P/en>



## 13 Reports, 8 Handbooks

*ITU-R P-series Reports generally provide background information about the prediction methods of ITU-R Study Group 3.*

*Handbooks provide reference material, a statement of the current knowledge, the present position of studies, or of good operating or technical practice.*

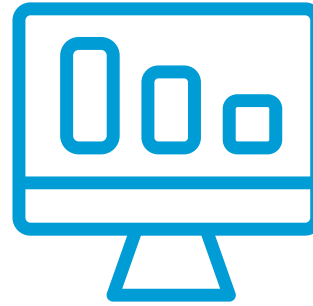
<https://www.itu.int/pub/R-HDB>



### **Radio-meterological data**

*Global datasets of propagation parameters.*

*These are usually integral parts of ITU-R P-series Recommendations, datafiles are provided with the Recommendation (zip file)*



### **Measurement databanks**

*DBSG3 contains radiowave propagation measurement data that have been submitted to, and accepted by, ITU-R Study Group 3 in accordance with the principles given in Recommendation ITU-R P.311.*

*The data are used for testing related P-series propagation prediction methods.*

<https://www.itu.int/en/ITU-R/study-groups/rsg3/Pages/dtbank-dbsg3.aspx>



### **Software**

*ITU-R P-series Recommendations provide detailed propagation prediction algorithms.*

*With the increase in complexity it is increasingly important to provide example implementations and validation examples to help users of the Recommendations.*

<https://www.itu.int/en/ITU-R/study-groups/rsg3/Pages/iono-tropospheric.aspx>

# Working methods

## WP 3J

Propagation fundamentals  
Chair: Carlo Riva

## WP 3K

Point-to-area propagation  
Chair: Paul McKenna




## WP 3L

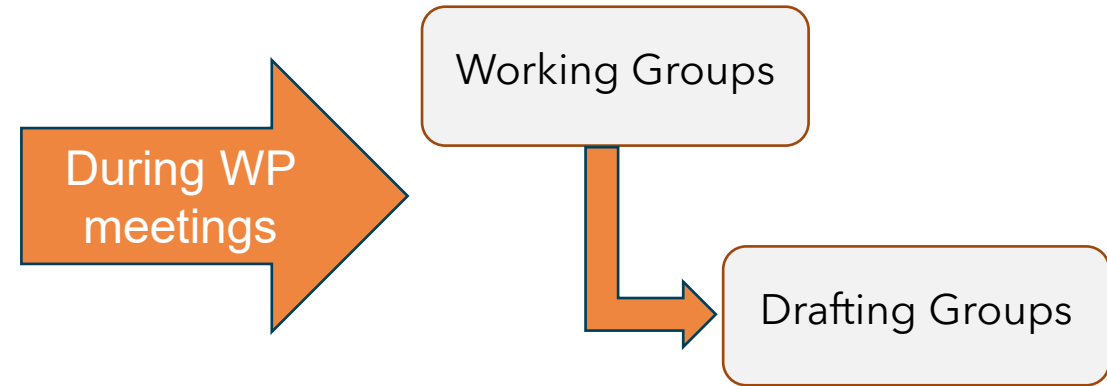
Ionospheric propagation and radio noise  
Chair: Angelo Canavitsas (Acting)

## WP 3M

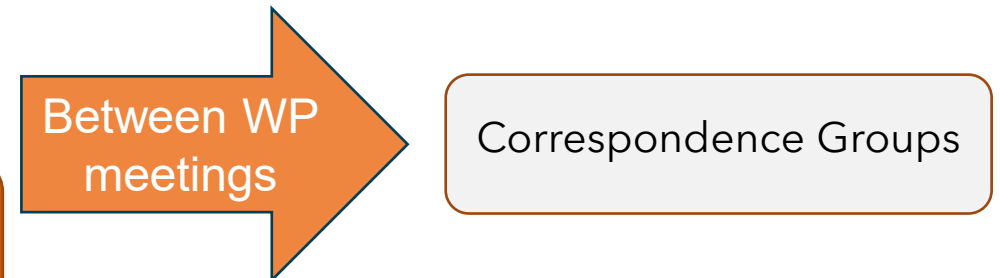
Point-to-point and Earth-space propagation  
Chair: Richard Rudd (Acting)



 SG 3 Chair: Clare Allen  
 Counsellor: David Botha  
 [SG 3 website](#)



*In-person meetings, with virtual participation possible, taking place over 2 weeks, typically once a year*



*Online sessions scheduled as needed between block meetings*

# World Radiocommunications Conference 2027



AI	Lead	SG1	SG3	SG4	SG5	SG6	SG7
1.1	4A	-	M	C	ABCD	-	BCD
1.2	4A	-	M	-	ABC	-	ABC
1.3	4A	-	M	-	AC	-	CD
1.4	4A	-	M	B	ABC	B	C
1.5	4A	B	-	C	-	-	-
1.6	4A	B	M	BC	ABCD	A	BCD
1.7	5D	B	KM	AC	ABC	-	BCD
1.8	5B	-	JKM	AC	AC	-	CD
1.9	5B	-	L	-	C	A	A
1.10	5C	A	JM	ABC	AB	A	CD
1.11	4C	-	LM	AB	ABCD	A	BCD
1.12	4C	-	LM	B	ABCD	-	CD
1.13	4C	-	LM	A	ABCD	A	BCD
1.14	4C	-	L	B	ACD	-	BC
1.15	7B	B	J	AC	ABCD	-	ACD
1.16	7D	B	JM	AC	ABD	-	-
1.17	7C	-	LM	AC	ABCD	-	BD
1.18	7C, 7D	-	JM	AC	ABC	-	-
1.19	7C	-	M	A	ABCD	-	B

*ITU-R Study Group 3 aims to provide neutral up to date, evidence-based, information on propagation modelling.*

*For this we need to apply current scientific methods and collect data representative of all environments so that our prediction methods can be applied in spectrum management around the globe.*

**Thank you!**

**Disclaimer**

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of ITU and of the Secretariat of the ITU concerning the legal status of the country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries